



## ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

### RESPONSIVENESS SUMMARY TO COMMENTS RECEIVED DURING EPA COMMENT PERIOD

For

**Proposed Air Quality Control Permit Number 1000194**

**Mojave Pipeline Operating Company, Topock Compressor Station**

**Begin Public Notice : November 4, 1997**

**End Public Notice : December 5, 1997**

The following comments were submitted for Benson Compressor Station permit on December 7, 1997. Since these comments are applicable to the Topock Compressor Station permit, they have been addressed here.

#### **Comments on Attachment A : General Provisions**

*Comment 1: Section III.B.5: Permit Revision, Reopening, Revocation and Reissuance, or Termination for Cause. In order to clarify the permit requirements for the source, this section should state that, apart from reopenings to include new applicable requirements, a reopening does not result in resetting the 5-year permit term. Note that when a permit is reopened to include new applicable requirements, the entire permit must go through the public review process to reset the 5-year permit term.*

*Response:* To clarify that permit reopenings, except for permit reopenings to include new applicable requirements, do not result in resetting the five-year term, Section III.B.5 has been revised as follows:

- (i) Section III.B.5 has been renamed as Section III.C
- (ii) The following sentence has been added to the language:

"Permit reopenings for reasons other than those stated in paragraph III.B.1 of this Attachment shall not result in a resetting of the five year permit term."

*Comment 2: Section XIII. Reporting Requirements. As the permit is currently written, the permittee is referred first to Attachment B, and subsequently to Attachment A to determine the reporting requirements. To provide clarification for the source, language should be included which explicitly states that reports of required monitoring should be submitted every 6 months, in addition to permit deviation reporting required by Attachment A, Section XI.*

*Response:* To clarify the reporting requirements of the permit to the source, Section XIII has been rewritten to read as follows:

"Permittee shall comply with all of the reporting requirements of this permit. These include

all of the following:

- (i) Compliance certifications pursuant to Attachment A, Section VII of this permit.
- (ii) Permit deviation reporting pursuant to Attachment A, Sections XI.A, XI.B, and XI.C of this permit.
- (iii) Reporting requirements listed in Attachment B, Section III of this permit.”

Note: Making this modification results in Section III.B of Attachment "B" becoming redundant. Therefore, it was deleted.

*Comment 3: Section XVI. Facility Change Without Permit revision. While changes made to this section due to past EPA comments have been useful, we feel further revisions are necessary. We are concerned that ADEQ may not be made aware of changes that should be processed as a permit revision, but which the source mistakenly believes it can make without a permit revision or notification to ADEQ. As written, the permit slightly contradicts itself. Section XVI.C states “Changes that meet the criteria listed in subsections A, B, and C.1 of this Section are exempt from the notification requirements.” Immediately following this, Section C.1 says “Examples of changes that do not require notification”. While the first statement lists specific criteria a change must meet to avoid notification requirements, the words “Examples of” in the second statement allow a wide range of changes that do not require notification. This wide range of changes may allow changes to inadvertently slip past ADEQ without review. Thus, the words “Examples of” in Section XVI.C.1 should be omitted to narrow the changes exempt from notification requirements. Also, this section should state that a source may be required to prove a modification meets the criteria for exemption from the notification requirement.*

*Response:* ADEQ agrees with EPA on this comment. To clarify the meaning of Section XVI, the following two changes have been made:

- (i) The last sentence of Section XVI.C has been deleted
- (ii) Section XVI.C.1 has been deleted.

With these changes, the permit does not address facility changes which would not require notification to ADEQ. ADEQ is committed to working one-on-one with various industrial source groups to develop lists of such facility changes that would not require notification.

In addition to these changes, the review process revealed that the permit shield exemption for facility changes without revisions and minor revisions had been omitted from the permit. Consequently, Section X X of Attachment A of the permit now reads as follows (also see response to Comment 5):

"Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements identified in Attachment "C" of this permit. The permit shield shall not apply to any changes made pursuant to Section XV.B of this Attachment and Section XVI of this Attachment."

*Comment 4: Section XVII.B. Testing Requirements. The first sentence of this section should be changed to read "Performance tests shall reflect representative operational conditions"*

*Response:* Permit shield language (Section XX, Attachment A) modified to read as:

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements identified in Attachment "C" of this permit. The permit shield shall not apply to any changes made pursuant to Section XV.B of this Attachment and Section XVI of this Attachment.

In accordance with this change, Section II.A which now reads:

"The Permittee shall comply with all conditions of this permit, **which sets forth all applicable requirements** of Arizona air quality statutes and air quality rules...."

has been modified to read as:

"The Permittee shall comply with all conditions of this permit **including all applicable requirements** of Arizona air quality statutes and the air quality rules...."

#### **Comments on Attachment B: Specific Conditions**

*Comment 6: Section II.A.1 Monitoring and Recordkeeping Requirements. This permit condition should describe the sulfur measuring technique, or cite the procedure from a regulation.*

*Response:* The requirement in Section II.A.1 provides a method for continuous monitoring for particulate, opacity, and sulfur dioxide emission standards (Sections I.A.1, I.A.2, I.A.3, and I.A.4 of Attachment B). It has been established -in the technical review document and through numerous past discussions with EPA staff- that natural gas combustion results in minimal emissions, and that the emissions standards are protected by an ample margin of safety. It was decided, therefore, that imposing a rigorous monitoring schedule would not be required, and would be placing an unnecessary burden on the source. The Federal Energy Regulatory Commission's (FERC) Tariff agreement presented itself as a feasible alternative to the "daily" monitoring requirements of AAC R18-2-719.J. As stated in the technical review document, the Tariff agreement limits the sulfur content of the natural gas to 0.017 percent by weight of sulfur (an order of magnitude lesser than the standard). The Permittee cannot utilize natural gas that has a sulfur content greater than the aforementioned limit without violating the Tariff agreement. Specifying the monitoring requirement in this manner streamlines the permit conditions.

*Comment 7: By explicitly laying out only one reporting requirement, this section could be misinterpreted to mean that no other exceedances need to be reported. As described in Sections VII (Compliance Certification) and XI (Permit Deviation Reporting) of Attachment A, any emissions in excess of the limits established by this permit must be reported. To avoid confusion, Section III.C should be deleted from this permit.*

*Response:* Please see the Response to Comment 2.

*Comment 8:* *Section IV.B. Testing Requirements. If the source does not use an EPA reference test method, the "alternate and equivalent test method" chosen must be clearly defined in the permit. Note that alternative test methods must be pre-approved by the EPA through the appropriate process, e.g., SIP revisions. Alternative test methods may not be approved for the first time through the Title V permit issuance process, due to time and resource constraints. For these specific permits, it is unclear to the EPA why test methods are specified for CO and NO<sub>x</sub>, since no limits exist for these pollutants. For future permits where test methods are included for pollutants with applicable emissions limits, the language in this section needs to be changed as described above. Please inform us of the reason for including tests for CO and NO<sub>x</sub>.*

*Response:* Section IV.B of Attachment B now reads as follows:

## **TESTING REQUIREMENTS**

### **A. General Electric Frame 3 Regenerative Gas Turbine**

Permittee shall conduct a set of performance tests on this turbine. Performance tests shall be performed when the turbine is operated beyond fifteen cumulative days. This performance test shall be completed within six months prior to this permit expiration. The test shall include all of the pollutants listed in Section IV.C. of this Attachment.

### **B. Solar Centaur H Simple Cycle Natural Gas Turbine Engine**

[40 CFR 60.8, 40 CFR 60.335]

1. Permittee shall conduct annual performance test on this turbine to determine emissions of nitrogen oxides in accordance with the requirements of 40 CFR 60.335. Test method specified in section IV.C. of this Attachment shall be used.
2. Permittee shall also conduct a performance test to determine emissions of carbon monoxide once during the first annual test. Test method specified in section IV.C. of this Attachment shall be used.

### **C. Test Methods**

Permittee shall use the following EPA approved Reference test methods to conduct performance tests for pollutants specified:

1. Nitrogen Oxides. EPA Reference Method 20.
2. Carbon Monoxide. EPA Reference Method 10.

Except for emissions testing required under Article 9 or Article 11, Permittee may submit an alternate and equivalent test method(s) **that is listed in 40 CFR Subpart**

**60, Appendix A** to the Director in any test plan for approval by the Director.

Emission limits exist for NOx and CO emissions from the previous installation permit. Hence they have been included.

#### **Comments on Attachment C: Applicable Regulations**

*Comment 9: As described in Comment # 5 above, there are two options for obtaining a permit shield. If Section XX (Permit Shield) of Attachment A is deleted completely, then Attachment C must include language that explicitly states a permit shield is granted to the permittee. For either option, an adoption date of the version of each rule that is being shielded from must be included in Attachment C.*

*Response:* Please see Response to Comment 5. Attachment C now states : "Compliance with the terms contained in this permit shall be deemed compliance with the following federally applicable requirements **in effect on the date of permit issuance:.....**".

#### **Comments on Attachment E: Insignificant Activities**

*Comment 10: This section lists units which may be considered to be "insignificant activities". The purpose of defining insignificant activities is to specify those activities for which there may be less detail provided in the permit application. Ant insignificant activities at a Title V source are still subject to all applicable requirements. Some of the insignificant activities listed in Attachment E may be subject to generally applicable requirements, such as limits on opacity or requirements to control fugitive dust. To the extent that these insignificant activities are subject to unit-specific or generally applicable requirements, the permit must include these requirements and require these units to comply with these requirements. Attachment E should clearly state that these units are subject to all applicable requirements, and to the requirements of this permit. These units are also subject to the other requirements of Part 70, such as monitoring and compliance certifications. Please see White Paper 2, which addresses to what extent part 70 requirements may be minimized for these units.*

*Response:* AAC R18-2-101.54 defines an "insignificant activity" as follows:

"Insignificant activity" means an activity in an emissions unit that is not otherwise subject to any applicable requirement and which belongs to one of the following categories:

- a. Landscaping.....etc.
- b. Gasoline storage tanks.....etc.
- c. Diesel and.....etc.
- d. Batch mixers.....etc.
- e. Wet sand.....etc.
- f. Hand-held or manually operated equipment.....etc.
- g. Powder....etc.
- h. Internal...etc.

I. Lab equipment....etc.

- j. Any other activity which the Director determines is not necessary, because of it's emissions due to size or production rate, to be included in an application in order to determine all applicable requirements and to calculate any fee under this Chapter.

From this definition, it is clear that under Arizona rules for a unit to qualify as an insignificant activity, there should be no generally applicable requirements that the source may be subject to.

## RESPONSIVENESS SUMMARY

To EPA Comments on Proposed Title V Permit  
During Official 45-Day EPA Review Period for

Air Quality Control Permit No. 1000194  
Mojave Pipeline Company  
Topock Compressor Station

The following comments were made during the official 45-day EPA Review period:

*Comment 1: Attachment A. General Conditions. Please make the correction to Sections III.5, XVI.C, and XVII to match the recently approved ADEQ compressor station permits.*

Response: The conditions have been changed to match the recently approved ADEQ compressor station permits. Section III.5 has been changed to read as follows:

"C. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall, except for reopenings under paragraph 1 above, affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in Section III.B.1 of this attachment shall not result in a resetting of the five year permit term."

Section XVI.C has been changed to read as follows:

"C. For each such change under subsections A and B of this Section a written notice by certified mail or hand delivery shall be received by the Director and, for Class I permits, the Administrator, a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change as but must be provided as far in advance of the change as possible or, if advance notification is not practicable, as soon after the change as possible.

Each notification shall include:

1. When the proposed change will occur.
2. A description of each such change.
3. Any change in emissions of regulated air pollutants.
4. The pollutants emitted subject to the emissions trade, if any.
5. The provisions in the implementation plan that provide for the emissions trade with which the source will comply and any other information as may be required by the provisions in the implementation plan authorizing the trade.



6. If the emissions trading provisions of the implementation plan are invoked, then the permit requirements with which the source will comply.
7. Any permit term or condition that is no longer applicable as a result of the change."

Section XVII.A and XVII.B have been revised to read as follows:

"A. Operational Conditions During Testing

Tests shall be conducted during operation at the normal rated capacity of each unit, while operating at representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the Director, testing may be performed at a lower rate. Operations during startup, shutdown, and malfunctions (as defined in A.A.C. R18-2-101) shall not constitute representative operational conditions unless otherwise specified in the applicable standard.

B. Test Plan

At least 14 calendar days prior to performing a test, the owner or operator shall submit a test plan to the Director, in accordance with A.A.C. R18-2-312.B and the Arizona Testing Manual. This test plan must include the following:

1. test duration;
2. test location(s);
3. test method(s); and
4. source operation and other parameters that may affect test results."

*Comment 2: Attachment B.I.A. Natural Gas-fired Caterpillar Reciprocating Engines. The number of the installation permit should be included in the citation.*

**Response:** ADEQ agrees with the EPA on this comment. The installation permit number has been added to the permit condition citation.

*Comment 3: Attachment B.I.C. Two additional engines. As written, this condition could be read to imply that the BACT determination need only be reviewed by the Permittee, and not by ADEQ. The SIP Rule R9-3-304.A.3 only specifies that "... the determination of BACT shall be reviewed and modified as appropriate..." Although, this rule states that the operator or owner may be required to determine the adequacy of BACT, the actual definition of BACT (R9-3-101.21) clarifies that BACT determinations are ultimately made by the Director. Please correct this condition to clarify that the review of the BACT determination must be approved by the Director.*

**Response:** ADEQ agrees with the EPA on this comment. The condition has been revised to read as follows:

"C. Two Additional Engines

Permittee shall review and modify Best Available Control Technology (BACT), as approved by the Director, as appropriate at the latest reasonable time which is no later than 18 months prior to commencement of

construction. An application for a significant revision shall be submitted for incorporation of the new emission limits.

[A.A.C. R18-2-406.A.3]"

Comment 4: *Attachment B.I.D.1.a. Open areas, Roadways, Streets, Storage Piles or Material Handling. This condition could create a problem by excluding credible evidence. However, in this case the test method is actually cited in the SIP rule itself. While we cannot require a separation of the limit and the monitoring method in this situation, the language in the permit should be revised to match the language in the SIP rule exactly ("greater than 40% measured in accordance with the Arizona Testing Manual, Reference Method 9"). We recognize this seems like a very trivial change, but have received guidance from within the EPA that the language "measured in accordance with" matches the language in the NSPS 40 CFR 60.8 directly, and is somehow more acceptable.*

Response: ADEQ agrees with the EPA on this comment. Condition I.D.1.a of Attachment B has been revised to read as follows:

"Visible emissions from open areas, roadways, streets, storage piles, or material handling shall not have an opacity greater than 40% measured in accordance with the Arizona Testing Manual, Reference Method 9."

Comment 5: *Attachment B.II.A.3. Nitrogen Oxides and Carbon Monoxide. EPA agrees with ADEQ that performing maintenance on the reciprocating engines is an important aspect of assuring compliance with NOx and CO emission limits. However, this permit condition only requires records to be kept of maintenance, rather than setting a schedule by which maintenance must be performed. Please add language which sets forth a specific schedule of maintenance to be followed. Note that the turbine manufacturer's suggested maintenance schedule may be acceptable for this purpose. Also, condition II.A.3.b. conflicts with the testing requirements of IV.A.1 by requiring annual tests on each unit. Please reconcile these two conditions.*

Response: ADEQ agrees with the EPA on this comment. This comment has been revised to read as follows:

"3. Nitrogen Oxides and Carbon monoxide

- a. Permittee shall maintain the engines in accordance with the turbine manufacturer's specification. Permittee shall maintain copies of emission related maintenance records performed on the reciprocating engines.

[A.A.C.R18-2-306.A.2]

- b. Permittee shall conduct performance tests mentioned in Section IV.A.1 of this permit to verify compliance with the limits specified in Section I.B.3., & 4. of this Attachment

[A.A.C.R18-2-311]"

*Comment 6: Attachment B.II.A.5. Fuel Amount. Please change this condition to clarify that the only exemption from the requirement to record fuel use is during routine maintenance and calibration of the fuel meter. (emphasis added)*

Response: ADEQ agrees with EPA on this comment. This condition has been changed to read as follows:

"5. Fuel Amount

Permittee shall record on an hourly basis the amount of fuel combusted in each Cooper Bessemer and Caterpillar engine except during periods of routine maintenance and calibration of the fuel meter or periods of switching between the Caterpillar engines. This record may be kept in an electronic format as long as such records are in a format that cannot be altered or modified after recording. Permittee shall provide a timetable to the Director within 90 days after permit issuance for the development and installation of an electronic recordkeeping system that cannot be altered or modified after recording."

*Comment 7: Attachment B.III. Reporting Requirements. Reports of required monitoring must be submitted every 6 months, pursuant to A.A.C. R18-2-306.A.5.a. As described in the preamble to 40 CFR Part 70, these reports must include all recordkeeping performed in place of monitoring, i.e., (for this permit) records of dust control measures required by Section II.B.1. Please add a new provision (III.D) requiring the Permittee to submit a report, at least every 6 months, of all records required under Section II.B.1. This citation for the new condition should be A.A.C. R18-2-306.A.5.a. For convenience, this requirement may be timed to coincide with the compliance certifications required by Section VII of Attachment A.*

Response: ADEQ agrees with the EPA on this comment. A new condition III.D has been added to the permit. Section III.D reads as follows:

"At the time the compliance certifications required by Section VII of Attachment "A" are submitted, the Permittee shall submit reports of all monitoring activities required by Section II of this Attachment performed in the six months prior to the date of the report."

*Comment 8: Attachment B.IV.A.1. Testing Requirements. According to the engineering evaluation for this permit, ADEQ "proposed to test all the units the first year and then based on those results, the Department would allow testing for only one reciprocating engine per year on a rotational basis." EPA agrees with ADEQ that all engines should be tested the first year to establish whether the emissions from each engine are similar. The current permit language should be changed to include this requirement. Also, please add language to clarify that the "rotational" testing (which may be allowed after the first year) must include all three Cooper Bessemer engines over a period of three years. In other words, the same engine cannot be tested year and year again in lieu of rotating which engine is tested.*

Response: ADEQ agrees with the EPA on this comment. The condition has been changed to read as follows:

**"A. Natural Gas Fired Cooper Bessemer Reciprocating "clean burn" IC Engines (3) & Natural Gas Fired Caterpillar Reciprocating Engines**

1. Permittee shall conduct performance tests to determine the emissions of nitrogen oxides and carbon monoxide from all the engines mentioned above within the first anniversary of the issuance of this permit. Based on the results of these tests, the Department shall specify the units to be tested annually in the remaining term of the permit on a rotational basis. Units chosen for rotational testing shall be such that all the units are tested at least once during the permit term. Each annual test shall be completed prior to each anniversary date of this permit issuance. Test methods specified in section IV.B. of this Attachment shall be used."

*Comment 9: Attachment B.IV.B. Test Methods. The last sentence should be modified to include a previously agreed upon correction as follows: "Permittee may submit an alternate and equivalent test method(s) that is listed under 40 CFR 60, Appendix A to the Director in any test plan for approval by the Director."*

Response: ADEQ agrees with the EPA on this comment. The condition has been changed to read as follows:

**"B. Test Methods**

Permittee shall use the following EPA approved Reference test methods to conduct performance tests for pollutants specified:

1. Nitrogen Oxides: EPA Reference Method 20.
2. Carbon Monoxide: EPA Reference Method 10.
3. Opacity: EPA Reference Method 9.
4. Non-Methane Hydrocarbon Method 25A.
5. Sulfur Dioxide Method 20.

Permittee may submit an alternate and equivalent test method(s) that is listed under 40 CFR 60, Appendix A to the Director in any test plan for approval by the Director."

*Comment 10: Attachment E. Insignificant Activities. EPA would like to clarify that although this permit lists "Routine startups and shutdowns" as an insignificant activity, this in no way exempts these activities from compliance with all applicable requirements. The term "insignificant activities" is used in 40 CFR 70.5, which deals with application content. The purpose of defining insignificant activities is to specify those activities for which there may be less detail provided in the permit application (see R18-2-304.D.7). Any insignificant activities at a Title V source are still subject to all applicable requirements.*

Response: ADEQ agrees with the EPA on this comment. As a result, routine startups and shutdowns

have been deleted from the insignificant activities list.

*Comment 11: Technical Support Document. A copy of the "Conformity Test between AAC Title 18, Chapter 2 Rules and Applicable SIP" should be attached to this permit and/or linked through the EPSS.*

Response: A copy of the "Conformity Test between AAC Title 18, Chapter 2 Rules and Applicable SIP" will be attached to the EPSS.